

HYDRAULIC CONTROL CIRCUIT FOR A HYDRAULIC LIFTING CYLINDER

Abstract of the Disclosure

A hydraulic control circuit for a hydraulic cylinder is described for the raising and lowering of a boom on a telescopic loader. First and second chambers of the hydraulic cylinder are connected to a control valve over first and second supply lines and are selectively connected to either a hydraulic pressure source or to a hydraulic reservoir. The circuit includes on-off valves for controlling the flow through a first hydraulic line extending between the first chamber of the cylinder and the hydraulic reservoir, and through a second hydraulic line extending between the second chamber and the hydraulic reservoir in such a way that a floating position can be provided. Furthermore, a load-holding valve arrangement is provided in the first supply line at a location between the control valve and the first chamber of the cylinder. To provide assurance against uncontrolled lowering of the boom during switching to the floating position under load, a valve arrangement is provided that controls the flow rate as a function of the flow rate.